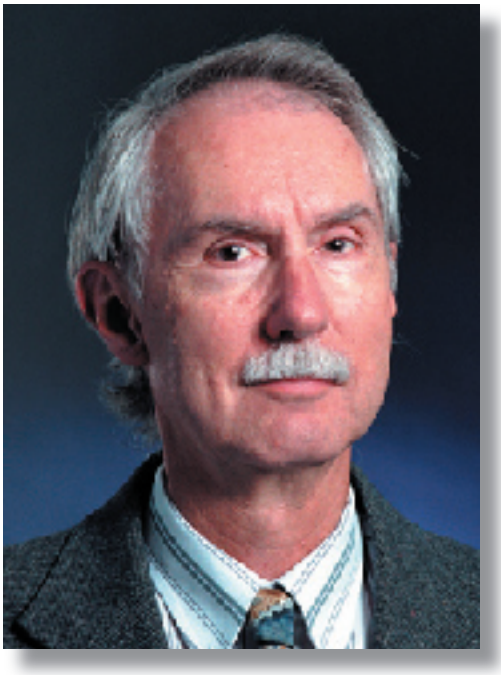

Dr. Herschel B. Smartt

More than 33 years of research and development experience in manufacturing, materials processing, machine design and intelligent machines.

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Licensing information

For information on licensing INL technologies such as those developed by Dr. Smartt, contact the Lead Account Executive for Industrial Processing and Manufacturing:

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Education: Dr. Herschel B. Smartt received his Bachelor's Degree, Master's Degree, and Ph.D., all in mechanical engineering, from the University of Texas at Austin.

Work experience: Dr. Smartt has over 33 years research and development experience in manufacturing, materials processing, machine design and intelligent machines. This includes solidification microstructure development, aluminum casting and iron foundry technologies, welding, diagnostics, sensing and control of a variety of manufacturing processes, extensive research on intelligent sensing and control, and intelligent machine architectures.

Professional endeavors: Dr. Smartt is an editorial board member for the international journal of Science and Technology of Welding and Joining, and a key reader for the American Welding Society's (AWS) Welding Journal in automation, sensing, and control. He is a member of the AWS Technical Papers Committee, chair of the AWS Research and Development Committee, and Ex Officio member of the AWS Government Affairs Liaison Committee. He has participated in thesis and dissertation committees at the University of Idaho, Idaho State University, Massachusetts Institute of Technology, and the University of Aalborg. Dr. Smartt was awarded A. F. Davis Silver Medal Awards in the category of Machine Design by the American Welding Society in both 1993 and 2004, and elected a Fellow of the American Welding Society in 1997. Dr. Smartt received the AWS Adams Award in 1999 and presented the Adams Lecture at the AWS annual meeting in April 1999. He also received the "INL Lifetime Achievement Award for Inventorship".

Patents:

U.S. Patent No. 4,712,722 – Concurrent Ultrasonic Weld Evaluation System

U.S. Patent No. 4,825,038 – Method for Controlling Gas Metal Arc Welding

U.S. Patent No. 4,970,091 – Method for Gas-Metal Arc Deposition

U.S. Patent No. 5,052,331 – Apparatus for Gas-Metal Arc Deposition

U.S. Patent No. 6,178,819 – Inspection Apparatus for Evaluating a Partially Completed Weld

U.S. Patent No. 6,236,017 – Method and Apparatus for Assessing Weld Quality

U.S. Patent No. 6,365,873 – Apparatus for the Concurrent Inspection of Partially Completed Welds